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FY 2004 SUPERFUND ANNUAL REPORT

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APPENDIX B: Glossary

-A-

Administrative Order on Consent - a legal agreement signed by EPA and an individual, business, or other entity through which the violator agrees to pay for correction of violations, take the required corrective or cleanup actions, or refrain from an activity. It describes the actions to be taken, may be subject to a comment period, applies to civil actions, and can be enforced in court. Unlike a consent decree, an administrative order on consent does not have to be approved by a judge.

-B-

biological contaminants - living organisms or derivatives (e.g. viruses, bacteria, fungi, and mammal and bird antigens) that can cause harmful health effects when inhaled, swallowed, or otherwise taken into the body.

brownfields - abandoned, idled, or underused industrial and commercial facilities/sites, the expansion or redevelopment of which is complicated by real or perceived environmental contamination. They can be in urban, suburban, or rural areas. EPA's Brownfields program helps communities mitigate potential health risks and restore the economic viability of such areas or properties.

-C-

cleanup - actions taken to deal with a release or threat of release of a hazardous substance that could affect humans or the environment. The term "cleanup" is sometimes used interchangeably with the terms "remedial action," "removal action," "response action," or "corrective action."

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) - commonly known as Superfund, this law, enacted by Congress on December 11, 1980, created the Superfund program. Specifically, CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) - an automated inventory of site information for all potential or confirmed Superfund sites.

Community Advisory Group - a committee, task force, or board comprised of citizens affected by a hazardous waste site. These groups provide a public forum for community members to present and discuss their needs and concerns about the decision-making process at sites affecting them.

consent decree - a legal document, approved by a judge, that formalizes an agreement reached between EPA and potentially responsible parties (PRPs) through which PRPs will conduct all or part of a cleanup action at a Superfund site; cease or correct actions or processes that are polluting the environment; or otherwise comply with EPA initiated regulatory enforcement actions to resolve the contamination at the Superfund site involved. The consent decree describes the actions PRPs will take and may be subject to a public comment period.

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construction completion - the stage in cleanup when physical construction of all cleanup remedies is complete, all immediate threats have been addressed, and all long-term threats are under control. Though long-term cleanup actions may still be operating, the site is often ready for economic, social, or environmental reuse.

contaminant - any physical, chemical, biological, or radiological substance or matter that has an adverse effect on air, water, or soil.

contamination - introduction into water, air, and soil of microorganisms, chemicals, toxic substances, wastes, or wastewater in a concentration that makes the medium unfit for its next intended use; also applies to surfaces of objects, buildings, and various household and agricultural use products.

cost recovery - legal process by which potentially responsible parties who contributed to contamination at a Superfund site can be required to reimburse the Trust Fund for money spent during any cleanup actions by the federal government.

-D-

de micromis party - party whose contribution is equal to or less than (1) 0.002% of total volume or 110 gallons (such as two 55-gallon drums) or 200 pounds of materials containing hazardous substances, whichever is greater, or (2) 0.2% of total volume, if the party sent only municipal solid waste. EPA will not pursue a de micromis party for recovery costs, and if a private party threatens a small party with litigation, EPA will settle with that de micromis party for \$0.

de minimis party - party whose contribution of hazardous substances to a facility is minimal, in both volume and toxicity (or other hazardous effects) relative to the other hazardous substances at the site. EPA will often offer small settlements to de minimis parties.

dewatering - removing or separating a portion of the water in a sludge or slurry to dry the sludge so it can be handled and disposed of, and removing or draining the water from a tank or trench.

dredging - removal of mud from the bottom of water bodies. This can disturb the ecosystem and causes silting that kills aquatic life. Dredging of contaminated muds can expose biota to heavy metals and other toxics. Dredging activities may be subject to regulation under Section 404 of the Clean Water Act.

-E-

emergency removal action - steps taken to remove contaminated materials that pose imminent threats to local residents (e.g., removal of leaking drums or the excavation of explosive waste); and the state record of such removals.

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enforcement - EPA, state, or local legal actions to obtain compliance with environmental laws, rules, regulations, or agreements or obtain penalties or criminal sanctions for violations. Enforcement procedures may vary, depending on the requirements of different environmental laws and related implementing regulations. Under CERCLA, for example, EPA will seek to require potentially responsible parties to clean up a Superfund site or pay for the cleanup. In other situations, if investigations by EPA and state agencies uncover willful violations, criminal trials and penalties are sought.

“Enforcement First” principle - policy by which EPA seeks to compel those who are responsible for hazardous waste sites to take the lead in cleanup, thus conserving the resources of the Trust Fund.

-F-

Five-Year Reviews - generally required by CERCLA or program policy when hazardous substances remain on site above levels which permit unrestricted use and unlimited exposure. Reviews are performed five years following the initiation of a CERCLA response action, and are repeated every succeeding five years so long as future uses remain restricted. Five-year reviews can be performed by EPA or the lead agency for a site, but EPA retains responsibility for determining the protectiveness of the remedy.

-G-

ground water - the supply of fresh water found beneath the Earth's surface, usually in aquifers, which supply wells and springs. Because ground water is a major source of drinking water, concern is growing over contamination from leaching agricultural or industrial pollutants or leaking underground storage tanks.

-H-

Hazard Ranking System - the principal screening tool used by EPA to evaluate risks to public health and the environment associated with abandoned or uncontrolled hazardous waste sites. A score is calculated based on the potential of hazardous substances spreading from the site through the air, surface water, or ground water, and on other factors such as density and proximity of human population. This score is the primary factor in deciding if the site should be on the National Priorities List and, if so, what ranking it should have compared to other sites on the list.

hazardous substance - any material that poses a threat to human health or the environment. Typical hazardous substances are toxic, corrosive, ignitable, explosive, or chemically reactive; any substance designated by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or is otherwise released into the environment.

hazardous waste - by-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special EPA lists.

-I-

in situ - in its original place; unmoved unexcavated; remaining at the site or in the subsurface.

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institutional controls - actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use.

-M-

megasites - large, complex, and costly sites for which total cleanup costs are expected to equal or exceed \$50 million.

monitoring - periodic or continuous surveillance or testing to determine the level of compliance with statutory requirements or pollutant levels in various media or in humans, plants, and animals.

-N-

National Priorities List - EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under Superfund. The list is based primarily on the score a site receives from the Hazard Ranking System. EPA is required to update the list at least once a year. A site must be on the list to receive money from the Trust Fund for remedial action.

NCP 40 CFR Part 300 (National Oil and Hazardous Substances Contingency Plan) - the Federal regulation that guides determination of the sites to be corrected under both the Superfund program and the program to prevent or control spills into surface waters or elsewhere.

NFRAP (No Further Remedial Action Planned) - decisions are made from a site assessment perspective only; they simply denote that further Superfund National Priorities List assessment work is not required based on currently available information. In contrast, the archival of WasteLAN sites is made only when no further Superfund interest exists at a site. This means that sites are not archived if there are planned or ongoing removal or enforcement activities or if other Superfund interest still exists, even if a NFRAP decision was made during site assessment activities.

nonaqueous phase liquids - contaminants that remain undiluted as the original bulk liquid in the subsurface, e.g., spilled oil.

nontime-critical removals - removals where based on site evaluation, the lead agency determines that a removal action is appropriate and that there is a planning period of more than six months available before on-site activities must begin. The lead agency for nontime-critical removals will undertake an engineering evaluation/cost analysis or its equivalent.

-O-

orphan share - the financial responsibility assigned to a potentially responsible party who is insolvent or defunct and unaffiliated with other liable responsible parties. Orphan share compensation provides a major incentive for responsible parties to perform cleanups and settle claims quickly without litigation, and reduces transaction costs by wholly or partly resolving the question of who should bear the burden of orphan shares.

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-P-

PCBs (Polychlorinated Biphenyls) - mixtures of synthetic organic chemicals with the same basic chemical structure and similar physical properties ranging from oily liquids to waxy solids. PCBs have been demonstrated to cause a variety of adverse health effects.

pesticides - substances or mixture intended for preventing, destroying, repelling, or mitigating any pest. Also, any substance or mixture intended for use as a plant regulator, defoliant, or desiccant.

plume - visible or measurable discharge of a contaminant from a given point of origin. Can be visible or thermal in water, or visible in the air as, for example, a plume of smoke; the area of radiation leaking from a damaged reactor; area downwind within which a release could be dangerous for those exposed to leaking fumes.

pollutant - generally, any substance introduced into the environment that adversely affects the usefulness of a resource or the health of humans, animals, or ecosystems.

potentially responsible party - any individual or company—including owners, operators, transporters or generators—potentially responsible for, or contributing to a spill or other contamination at a Superfund site. Whenever possible, through administrative and legal actions, EPA requires PRPs to clean up hazardous sites they have contaminated.

Preliminary Assessment - the process of collecting and reviewing available information about a known or suspected waste site or release.

-Q-

quality assurance/quality control - a system of procedures, checks, audits, and corrective actions to ensure that all EPA research design and performance, environmental monitoring and sampling, and other technical and reporting activities are of the highest achievable quality.

-R-

radioactivity (radiological) - the property of some atoms to spontaneously give off energy as particles or rays. The atoms that make up the radioactive materials are the source of radiation.

Record of Decision - a public document that explains which cleanup alternative EPA used to address a site under the authority of CERCLA.

release - any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance, pollutant, or contaminant).

remedial action/long-term response - the actual construction or implementation phase of a Superfund site cleanup that follows remedial design.

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remedial design - a phase of remedial action that follows the remedial investigation/feasibility study and includes development of engineering drawings and specifications for a site cleanup.

remedial investigation and feasibility study - a phase of remedial action that follows the remedial investigation/feasibility study and includes development of engineering drawings and specifications for a site cleanup. The feasibility study usually recommends selection of a cost-effective alternative. It usually starts as soon as the remedial investigation is underway; together, they are commonly referred to as the "RI/FS". They are also known as a small-scale investigation of a problem to ascertain whether a proposed research approach is likely to provide useful data.

remediation - cleanup or other methods used to remove or contain a toxic spill or hazardous materials from a Superfund site; for the Asbestos Hazard Emergency Response program, abatement methods including evaluation, repair, enclosure, encapsulation, or removal of greater than 3 linear feet or square feet of asbestos-containing materials from a building.

removal/removal action - short-term immediate actions taken to address releases of hazardous substances that require expedited response.

response action - a generic term for actions taken in response to actual or potential health-threatening environmental events such as spills, sudden releases, and asbestos abatement/management problems; a CERCLA-authorized action involving either a short-term removal action or a long-term removal response. This may include but is not limited to: removing hazardous materials from a site to an EPA-approved hazardous waste facility for treatment, containing or treating the waste on-site, identifying and removing the sources of ground-water contamination and halting further migration of contaminants; any of the following actions taken in school buildings in response to AHERA to reduce the risk of exposure to asbestos: removal, encapsulation, enclosure, repair, and operations and maintenance.

RCRA (Resource Conservation and Recovery Act) - enacted by Congress in 1976, RCRA's primary goals are to protect human health and the environment from the potential hazards of waste disposal; to conserve energy and natural resource; to reduce the amount of waste generated; and to ensure that wastes are managed in an environmentally sound manner. In 1984, Congress enacted the Hazardous and Solid Waste Amendments which significantly expanded the scope and requirements of RCRA.

Return To Use Initiative - a policy that focuses on National Priorities List sites that were cleaned up prior to EPA's current emphasis on considering reuse during response activities. Many of these sites have remained vacant. With appropriate oversight, communities can reclaim these vacant sites. Returning these sites to beneficial use will provide local communities with valuable green space, recreational amenities, or commercial property. Removing the stigma associated with fenced and vacant Superfund sites may also increase local property values and the tax base.

risk - a measure of the probability that damage to life, health, property, or the environment will occur as a result of a given hazard.

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-S-

sediment - soil, sand, and minerals washed from land into water, usually after rain. They pile up in reservoirs, rivers and harbors, destroying fish and wildlife habitat, and clouding the water so that sunlight cannot reach aquatic plants. Careless farming, mining, and building activities will expose sediment materials, allowing them to wash off the land after rainfall.

site assessment - An initial phase of the Superfund process through which hazardous waste sites are evaluated, using preliminary assessments and site inspections, to develop a Hazard Ranking System score.

Site Inspection - the collection of information from a Superfund site to determine the extent and severity of hazards posed by the site. This phase follows and is more extensive than a preliminary assessment. The purpose is to gather information necessary to score the site using the Hazard Ranking System, and to determine if the site presents an immediate threat requiring prompt removal.

special accounts - cost recovery payments are deposited into "special accounts" that are sub-accounts within Superfund's Trust Fund. Special accounts are most commonly used when certain potentially responsible parties "cash out" their liability at a site rather than perform the cleanup work.

stakeholder - any organization, governmental entity, or individual that has a stake in or may be impacted by the Superfund program.

State of Emergency - a governmental declaration that may suspend certain normal functions of government, may work to alert citizens to alter their normal behaviors, or may order government agencies to implement emergency preparedness plans.

statutes of limitations - deadlines for filing lawsuits within a certain time after events that are the source of a claim.

Strategic Plan/Government Performance and Results Act - both of these hold Federal agencies accountable for using resources wisely and achieving program results. The Act requires agencies to develop plans for what they intend to accomplish, measure how well they are doing, make appropriate decisions based on the information they have gathered, and communicate information about their performance to Congress and to the public.

strict, joint and several liability - the liability scheme imposed by CERCLA.

Superfund - see CERCLA.

SARA (Superfund Amendments and Reauthorization Act) - legislation that amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) on October 17, 1986. SARA reflected EPA's experience in administering the complex Superfund program during its first six years and made several important changes and additions to the program. SARA stressed the importance of permanent remedies and innovative treatment technolo-

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gies; required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased State involvement; increased the focus on human health problems; encouraged greater citizen participation; and increased the size of the Trust Fund to \$8.5 billion.

surface water - all water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.).

-T-

Technical Assistance Grants - grants provided to citizens' groups to obtain assistance in interpreting information related to cleanups at Superfund sites or those proposed for the National Priorities List. Grants are used by such groups to hire technical advisors to help them understand the site-related technical information for the duration of response activities.

time-critical removals - removals where based on the site evaluation, the lead agency determines that a removal action is appropriate and that there is a period of less than six months available before response activities begin on-site.

toxic waste - a waste that can produce injury if inhaled, swallowed, or absorbed through the skin.

Triad Approach - a three-pronged approach using: systematic project planning; dynamic work plan strategy; and real-time measurement technologies for site investigation.

TCE (trichloroethylene) - a stable, low boiling-point colorless liquid, toxic if inhaled: used as a solvent or metal degreasing agent, and in other industrial applications.

Trust Fund - a fund set up under CERCLA authority to help pay for cleanup of hazardous waste sites with revenues subject to congressional appropriation.

-U-

Unilateral Administrative Order (UAO) - a legal document issued by EPA directing a potentially responsible party to perform site cleanup. A UAO sets forth the liability of the party for the cleanup, describes actions to be taken, and subjects the recipient to penalties and damages for noncompliance. Unilateral orders may be enforced in court. A UAO is EPA's most potent enforcement tool and a powerful settlement incentive. EPA usually only issues them to parties that are the largest contributors of waste to a site, are financially viable, and against whom there is strong evidence of liability.

-V-

VOCs (volatile organic compounds) - any organic compound that participates in atmospheric photochemical reactions except those designated by EPA as having negligible photochemical reactivity.

